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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|----------------------------|----------------------|---------------------|------------------|
| 10/556,233 | 02/09/2007 | Petra Biehl | C 2774 PCT/US | 3701 |
| 23657 COGNIS CORI | 7590 04/11/200 PORATION | EXAMINER | | |
| PATENT DEPA | | CHO, JENNIFER Y | | |
| 300 BROOKSIDE AVENUE AMBLER, PA 19002 | | | ART UNIT | PAPER NUMBER |
| | | | 1621 | |
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| | | | MAIL DATE | DELIVERY MODE |
| | | | 04/11/2008 | PAPER |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | | Application No. | Applicant(s) | | | | |
|--|--|---|--------------|--|--|--|--|
| Office Action Summary | | 10/556,233 | BIEHL ET AL. | | | | |
| | | Examiner | Art Unit | | | | |
| | | JENNIFER Y. CHO | 1621 | | | | |
| | The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply | | | | | | |
| A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). | | | | | | | |
| Status | | | | | | | |
| 1)□ | Responsive to communication(s) filed on <u>1/23/</u> | 08 | | | | | |
| · | | action is non-final. | | | | | |
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| | closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. | | | | | | |
| | · | parto Quayro, 1000 0.5. 11, 10 | 0.0.210. | | | | |
| Dispositi | on of Claims | | | | | | |
| 4)🛛 | Claim(s) <u>19-42</u> is/are pending in the application. | | | | | | |
| 4 | 4a) Of the above claim(s) is/are withdrawn from consideration. | | | | | | |
| 5) | 5) Claim(s) is/are allowed. | | | | | | |
| 6)⊠ | 6)⊠ Claim(s) <u>19-42</u> is/are rejected. | | | | | | |
| 7) | Claim(s) is/are objected to. | | | | | | |
| 8)□ | Claim(s) are subject to restriction and/or | election requirement. | | | | | |
| Application | on Papers | | | | | | |
| 9)☐ The specification is objected to by the Examiner. | | | | | | | |
| 10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner. | | | | | | | |
| •— | Applicant may not request that any objection to the | | | | | | |
| Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). | | | | | | | |
| 11) 🔲 - | 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. | | | | | | |
| Priority u | nder 35 U.S.C. § 119 | | | | | | |
| 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. | | | | | | | |
| | e of References Cited (PTO-892) | 4) Interview Summary | | | | | |
| 3) 🔲 Inforn | e of Draftsperson's Patent Drawing Review (PTO-948) nation Disclosure Statement(s) (PTO/SB/08) · No(s)/Mail Date | Paper No(s)/Mail Da 5) Notice of Informal P 6) Other: | | | | | |

Detailed Action

This office action is in response to Applicant's communication filed on 1/23/2008.

Claims 19-42 are pending in this application. Claims 1-18 have been cancelled.

Claim Rejections - 35 USC 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

- 1. Determining the scope and contents of the prior art.
- 2. Ascertaining the differences between the prior art and the claims at issue.
- 3. Resolving the level of ordinary skill in the pertinent art.
- Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 19-42 remain rejected under 35 U.S.C. 103(a) as being unpatentable over Walele et al. (US 5,959,130), in view Williams et al. (US 3,972,962).

Claims 19-42 also remain rejected under 35 U.S.C. 103(a) as being unpatentable over Eckey (US 2,182,397), in view Williams et al. (US 3,972,962).

For reasons, see previous office action and responses stated herein.

Response to Arguments

Applicant's arguments have been considered but are not persuasive for the following reasons:

The Examiner acknowledges Applicant's argument that the castor-based benzoate ester of Walele et al. using their tin oxalate catalyst, rather than the combination catalyst of the instant invention would result in a darker, and, therefore, less cosmetically-appealing product than the water-clear products of the instant invention. The Applicant has provided a graph showing a comparison of the resulting esters and their median color index to exemplify their assertions.

The Examiner does not find the graph convincing, particularly since the Applicant has not provided experimental details for the comparative examples in a formal declaration. The improved median color index for Applicant's combination catalyst can be a result of routine optimization due to variations in concentrations and other experimental conditions. The Examiner suggests the Applicant's file a formal declaration detailing their unexpected results.

The Examiner acknowledges Applicant's argument that the Williams et al. reference does not teach Applicant's specific catalysts, namely tin oxide and

phosphorus (I) compounds, e.g. phosphinic or hypophosphorous acids. Rather, Williams et al. teaches phosphoric (V) acid and alkyl tin oxides.

The Examiner does not find this argument convincing particularly since Williams et al. teaches that the type of esterification catalysts "can be widely varied" and that suitable esterification can be performed with phosphoric acid, alkyl tin oxides and "the like" (column 4, lines 34-41). This variation would include different oxidation states and alkyl substitution.

The Examiner acknowledges Applicant's argument that Eckey teaches as its "most suitable" esterification catalyst sulfonic acid and certain aromatic sulfonic acids, none of which suggest the beneficial catalysts of the instant invention.

The Examiner points out, however, that Williams et al. was used to correct this deficiency and used to teach the broad use of esterification catalysts and the equivalency of aromatic sulfonic acids and Applicant's particular esterification catalysts. Thus, the Examiner used Eckey in view of Williams et al. for the obvious rejection, not Eckey alone.

Therefore, it would be prima facie obvious to one of ordinary skill in the art at the time of the invention, to substitute variations of Williams et al.'s phosphoric acid and alkyl tin oxide catalyst, for the esterification reaction of Walele et al. and Eckey, while further optimizing Applicant's result-effective variables. Absent any showing of unusual and/or unexpected results over Applicant's particular catalyst and process steps, the art obtains the same effect on the esterification of benzoic acid and its esters. The

expected result would be an efficient synthesis of benzoic acid ester for the cosmetic industry.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jennifer Y. Cho whose telephone number is (571) 272 6246. The examiner can normally be reached on 9 AM - 6 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Yvonne Eyler can be reached on (571) 272 0871. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Jennifer Cho Patent Examiner Art Unit: 1621

> /SHAILENDRA - KUMAR/ Primary Examiner, Art Unit 1621